

Miscellaneous.

FISH CULTURE.

Legislative action was taken some time ago in Connecticut and Massachusetts to make the Connecticut river yield that quality and abundance of fish that distinguished it before so many buzzing industries of man's invention along its banks drove them away. In 1867 the commissioners of the two states employed the unrivaled piscatorial skill of Seth Green to hatch shad artificially, and after successfully performing that he put 40,000,000 young shad into the river at Holyoke, expecting a very perceptible result in 1870 or 1871. Last year the catch was the largest known for 20 years, all due to these operations. They have been continued each year since on a larger scale, and the results are such that the commissioners feel warranted in attempting to stock other waters than the Connecticut. They are only waiting for the suit between the state and the Holyoke water company, which has passed through all the courts of the state and is now before the supreme court of the United States, to be settled, when they will build a fishway up the Holyoke dam, and start salmon breeding. The Connecticut commissioners will this year place in the smallest rivers of the state six thousand young salmon, and thus have them ready to colonize in the king stream when the time comes. The heaven of this new enterprise is working in the minds of many men outside of government offices, who are giving their time and money to perfect a plan whereby the waters can be made as profitable as the land. As the Connecticut, unlike the Hudson, doesn't flow through the plantations of Dutch gourmands, who are unwilling to see even the spawn lie in their breeding places without an effort to pluck them out, but through a section interested in developing all the possibilities of nature, we may look for continued progress and profit in this enterprise.

PROTECTING FRUIT AND SEEDS FROM BIRDS.

A correspondent of the *London Field* gives the following method as having proved in his experience entirely efficacious:

And what, you will ask, is my talisman? Simply a ball of grey or white-brown linen thread. I take a ball of this in my hand, fasten the end of it to one of the twigs of the gooseberry or currant bush, and then cross the thread backwards and forwards from twig to twig in perhaps a dozen different directions, fasten off, and the thing is done; and it will last two years—the thread on the trees, I mean. It is not necessary the thread should be white or coarse; it ought rather to be fine and dark—a thing to be felt, not seen. I have watched the birds after performing the operation; they come boldly to settle on the trees, and they strike against these to them invisible snares, for such no doubt they deem them to be; they fly off in a terrible hurry, and settle on the walls or trees round about, longing and getting hungry, till at last they disappear, and you will see them no more.

As regard peas and other seeds which I always sow in drills, I simply stretch a thread, sometimes two, along each drill at about two inches from the ground, supporting it at that height by little forked sticks. If you put it much higher than this, the birds do not seem to care for it—it does not touch them; that is the grand secret, something which touches, something they do not well see, nor know what it means.

HOW TO MAKE FARM LIFE ATTRACTIVE.

1. By less hard work. Farmers often undertake more than they can do well, and consequently work too early and too late.
2. By more system. The farmers should have a time to begin and stop labor. They should put more mind and machinery into their work. They should theorize as well as practice, and let both go together. Farming is healthy, moral and respectable; and, in the long run, may be made profitable. The farmers should keep good stock, and out of debt.
3. By taking care of health. Farmers have a healthy variety of exercise, but too often neglect cleanliness, eat irregularly and hurriedly, sleep in ill-ventilated apartments, and expose themselves needlessly to cold.
4. By adorning the home. Books, papers, pictures, music, and reading should all be brought to bear upon the in-door family entertainments; and neatness and comfort, order, shrubbery, flowers and fruits should harmonize all without. There would be fewer desertions of old homesteads if pains were taken to make them agreeable. Ease, order, health, and beauty are compatible with farm life, and were ordained to go with it.

BETSEY AND I ARE OUT.

A New Version.

Go 'tend the door there, Bridget, and mind what you're about. For Betsey's mother's comin', and Betsey and I are out; I've stood the dear old lady as long as ever I can, And the more I've tried to stan' her the more I've had to stan'.

Since first we two got married, and came down here to live, She's had no end of orders and free advice to give: There's nothin' a hand is put to outside of the house or in, But she has a say about it that's always sure to win.

From nursin' babies to cleanin', from hayin' to milkin' cows, We've give her her way entirely, as much as the law allows; There's hardly a child or critter, a field or fence, or a stone, She hasn't a fault to find with, or ever can leave alone.

Perhaps I might stan' that much, if Betsey so should bid, And let the old lady boss it the same as she always did; But now that her tongue has taken to waggin' another course, I've got to be up an' doin', or look for a cheap divorce.

If I but say she's a meddlin', she tells my wife I drink; If ever I look at a woman, she gives my wife the wink; And comin' from meatin' Sunday, when Betsey was taken ill, She said, that, for half the symptoms, a woman could file a bill!

So 'tend the door, there, Bridget, and keep your wits about. And tell the dear old lady that Betsey and I are out; And then—in case she threatens to come some other day— Just add to the statement, Bridget, that out we intend to stay!

FIVE WAYS TO DESTROY ANTS.

1. Pour copiously, hot water as near the boiling point as possible, down their burrows and over their hills, and repeat the operation several times.
2. Entrap the ants by means of narrow sheets of stiff paper or strips of board, covered with some sweet, sticky substance. The ants are attracted by the sweet, and, sticking fast, can be destroyed as often as a sufficient number are entrapped.
3. Lay fresh bones around their haunts. They will leave everything else to attack these and when thus accumulated, dip them in hot water.
4. Pour two or three spoonfuls of coal-oil into their holes, and they will abandon the nest.
5. Bury a few slices of onions in their nests, and they will abandon them.

A good story is told of a German shoemaker in Utica, who having made a pair of boots for a gentleman of whose financial integrity he had considerable doubt, made the following reply to him when he called for the article: "Der poots ish not quite done, but der bill ish made out."

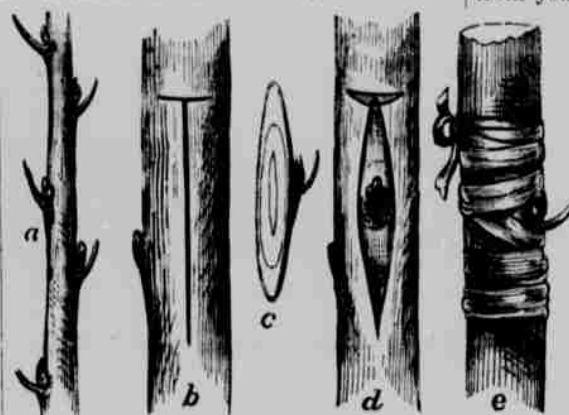
Horticulture.

BUDDING FRUIT TREES.

By Hon. S. L. Goodale, Secretary Maine Board of Agriculture.

Bud-Grafting or Budding, as it is commonly called, (*inoculation* of the old authors,) is the easiest and best mode of working small stocks. It differs from ordinary grafting mainly in the use of a single bud in the place of a scion bearing several buds, and in being performed in late summer instead of spring. It may be performed in spring, as soon as the bark peels freely, using scions of the previous year's growth which have been carefully kept in good condition; but this is rarely advisable, and perhaps only when we have a very valuable scion which it is desired by subdivision to increase the chance of saving, or to work as many stocks with it as there are buds upon it.

To insure success in budding, several conditions are essential. The most important of these are, 1st, *That the bark of the stalk should part freely from the wood*; for if, either by reason of the season of the year, or the feeble condition of the stock, the bark ad-



SHIELD BUDDING—DIFFERENT STAGES.

(a) Stick of buds. (b) Showing the T-shaped cut in the bark of stock. (c) Bud ready for insertion. (d) Stock with bud inserted. (e) Same tied up.

heres to the wood, the operation would certainly fail. 2d, *That the bud to be inserted should be properly ripened*; as otherwise it will not have vital energy enough to establish itself in its new home. With ripe, plump buds and a freely flowing sap, union between the bark of the bud and the albumen of the stock will be easily and speedily effected.

The proper time for budding varies with circumstances; as whether the season, be a wet or a dry one; the age and condition of the stocks, &c. In average seasons I have usually been most successful with plums and cherries from the middle to the end of July, with pears from the twentieth of July to the fifth of August, and with apples, from the fifth to the twentieth of August.

To prepare scions for budding, select well grown shoots of the present year's growth; cut off and reject all imperfectly developed buds at the lower end, and all unripe ones towards the top; then cut the leaves from the remainder at a point about the middle of the stems, leaving part of the foot-stalk of each, by which the better to handle the bud. In this condition the scions may be kept, if need be, for a week or ten days, or to be carried a considerable distance if wrapped in damp moss. Where scions are plenty, only a few of the

best buds in the middle of the shoot should be used, as those below are apt to be backward about starting into growth the next spring, while those at the upper part, being easily excited, are more liable to start into growth the same season, and especially if wet, warm weather ensues; in which case the young shoots are sure to be killed or injured the following winter. When the variety used is scarce and valuable, we would take more risk and insert some which would otherwise be rejected.

The preferable size for stocks to be budded is half an inch in diameter, (from one quarter to three quarters of an inch is the usual range); though sometimes both larger and smaller stocks are worked by this mode.

There are many methods of performing this operation; but the most common and the best, is what is called shield or T budding. It is performed as follows: Select a smooth part of the stock, then with a sharp budding knife make a horizontal cut across the bark quite through to the wood; from the middle of this cut make a slit downwards an inch or more long, going also through to the wood; so that both cuts taken together shall resemble a letter T. Next cut from your scion a thin slice of bark with a

little wood in the central portion of it, entering the knife about half an inch below, and bringing it out about as far above bud. This slice of bark and wood taken together is technically called a bud—the part which grows into a shoot (i. e. the bud proper) being known as its eye.

With the ivory haft of the budding knife, or if you have not such a knife, with a wedge of wood or ivory, gently raise the bark, beginning at the corners of the slit in the stock. Be very careful that the cambium or sliver be not disturbed or injured in the least. Then taking hold the bud by its foot-stalk, insert

it and gently push it down the bottom of the incision. The eye of the bud will now be about an inch below the horizontal cut. That part of the bud, if any, projecting above this should be cut off by passing the knife through it into the transverse slit again, so that a good joint be made.

A bass string, or some other which is soft and pliable, is now to be wound tightly about it, beginning at the bottom and covering every part except the eye of the bud and its foot-stalk, and tying it above the horizontal cut. The success of the operation, so far as its execution is concerned, depends mainly on smooth cuts, an exact fit of the bud to the incision made for it, and close tying. Cloudy and moist weather is more favorable than a hot sun and a dry day. In ten days or a fortnight, examine the buds and if they be found plump and full, the operation has been successful, and the string, if too tight, should be removed, and tied again more loosely, and above the bud only; in another fortnight it is well to remove the string entirely.

When the buds swell the following spring, the stock is to be cut off three or four inches above the bud. So much of the stock it is well to leave in order to tie the bud to it, as it grows, to prevent the shoot from being blown out by high winds. All other shoots from the stock (the robbers as they are called) are to be rubbed off as often as they appear. The spring following the stock may be cut off smoothly close to the bud.

A Washington paper says that disappointment in love is making drunkards of many women in that city.



(a.) Stock as left the first season. (b.) Dotted line showing where it is to be cut off smoothly the second year.